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ABSTRACT

The former HEW National Strategy for Youth Development model was a community-based planning and procedural tool to enhance and to prevent delinquency through a process of youth needs assessments, needs targeted programs, and program impact evaluation. The program's 12 Impact Scales have been found to have acceptable reliabilities, substantial predictive validity with respect to Self-Reported Delinquency (SRD), and consistent correlational structural validity. In order to access the ability of the Impact Scales (excluding SRD) to predict vandalism, and also to assess the predictive relationship of age and sex to vandalism, 1,550 randomly selected males and females, aged 10-19, completed the Impact Scales (excluding SRD), and a demographics questionnaire. Data analyses indicated that 73.4% of the sample could be correctly classified by the Impact Scales and by sex. The variables most predictive of vandalism were: Normative Peer Pressure; Youth Perceived Negative Labeling by Parents; Normlessness; Youth Perceived Lack of Access to Educational Roles; Youth Perceived Negative Labeling by Peers; and sex (males were more likely to engage in vandalism). These results are similar to those obtained in an earlier study which classified youths into delinquency levels from Impact Scales scores. The results indicate that the predictors of vandalism are the same for delinquency in general, and that peer relations are the most predominantly associative of several factors in both cases. (AG)

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Predicting vandalism in a general youth sample via the HEW youth development model's community program Impact Scales, age, and sex

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Abstract

A multiple stepwise discriminant function analysis of HEW community program Impact Scales, age, and sex vis a vis low, medium, and high vandalism levels was run on self-report data of 1,550 youth, ages 10 - 19, who comprised a roughly 6% systematic school system sample. Overall, 73.4% of the sample could be correctly classified via Impact Scales and sex, listed here in order of predictive power: Normative Peer Group Pressure, Youth Perceived Negative Labeling by Parents, Normlessness, Youth Perceived Negative Labeling by Peers, Youth Perceived Lack of Access to Educational Roles, and sex (males higher on vandalism). These results are very similar to a parallel study by this author predicting self-reported delinquency in general.

Predicting vandalism in a general youth sample via the HEW youth development model's community program Impact Scales, age, and sex

Juvenile vandalism is both an antecedent to and consequence of youth development problems embedded in United States Society. This problem became so enormous in terms of financial cost and social disruption that school vandalism alone was designated a "100 Million Dollar Challenge" in 1973 (Ellison, 1973), and prompted U.S. Congressman Birch Bayh's Subcommittee to Investigate Juvenile Delinquency to give our nations schools an "A" in school violence not long afterwards (Bayh, 1975). Juvenile vandalism has obviously remained a stubborn thorn in the side of educational and juvenile justice operations spurring further investigations such as the California School Board Associations "Task force report on student violence and vandalism" in 1980. Earlier expectations that vandalism would be a continuing problem were evident in articles such as "Planning facilities to discourage vandalism" (Zeisel, 1974), "Designing schools to minimize damage from vandalism and normal rough play" (Education Facilities Labs, Inc., 1974), and "Destructive norm - violating school behavior among adolescents: a review of protective and preventive efforts" (Sabatino et. al., 1978).

Juvenile vandalism has been studied with respect to its causes, consequences, prevention, and control. Peer pressure (Richards, 1979), social alienation, especially with respect to the school environment (Cardinell, 1974; Besag, 1975; National Education Association, 1975; and the Institute for Development of Educational Activities, (1974), accompanied by depersonalization (National Education Association, 1975), failure frustration, low self-esteem (Cardinell, 1974), feelings of injustice, neutralization, and desparation (Besag, 1977) have all

been cited as factors contributing to juvenile vandalism. Some studies have focused on student-school relationships (Wiles, 1977; Cardinell, 1974). Others such as done by the California School Board Association (1980) have examined TV violence, inconsistent legal sanctioning, and youths' lack of self-discipline in the absence of responsible adult control, as well as youths' disrespect for the law, as contributing to juvenile vandalism.

With respect to preventive efforts, the problem of vandalism has been addressed within the larger context of youth development and delinquency on a national level by the former HEW Office of Youth Development (OYD). HEW efforts resulted in a National Strategy for Youth Development Model (Elliott, Ageton, Hunter, and Knowles, Note 1) which incorporates among other things, a model of youth development and corresponding measures of youth development dimensions. Pilot testing had been conducted nationwide by HEW (Brennan & Huizinga, Note 2). More extensive implementation was carried out in Pennsylvania[1] (Lombardo, 1977; Truckenmiller, Lennon and Skok, 1978) allowing for further theoretical validation studies (Truckenmiller, 1978, 1982a, 1982b, 1982c, Notes 3 and 4). In these latter validation studies, certain of the HEW community program Impact Scales were shown to be very good predictors of self-reported delinquency as measured by a Self-Reported Delinquency (SRD) scale.

While the HEW project passed the way of many social programs, into extinction, the Pennsylvania Project (Lombardo, 1977) flourished for a few years as a centrally organized federation of community services with central data processing before decentralizing into almost exclusively local projects when the initial grant expired. Unfortunately, at neither national nor state levels were these projects supported through the decade of years or so needed for full program evaluation. Yet, much theoretical information of practical import was gained. Since the HEW

model serves as the theoretical context for examining vandalism in this study, a brief description of the HEW model will follow.

The HEW OYD National Strategy for Youth Development Model was promoted as a community-based planning and procedural tool designed to enhance positive youth development and prevent delinquency through a process of youth needs assessment, development of needs targeted programs, and program impact evaluation (Elliott et. al., Note 1). The National Strategy is unique in that it is predicated on a social-psychological model of youth development and contains requisite measures of the model's components. Of the many assessment tools employed (a problems and needs section; a knowledge of agencies questionnaire; a demographic information section; and a series of Impact Scales), the Impact Scales most directly reflect the models components in psychometric form. Acceptable reliabilities (Brennan & Huizinga, 1975), substantial predictive validity of Impact Scales with respect to SRD on the order of multiple $\underline{R} \simeq .70$ (Brennan & Huizinga, Note 3; and Truckenmiller, 1982), as well as consistent correlational structural validity (Brennan & Huizinga, Note 3; and Truckenmiller, 1978, 1982a, 1982b) have been found for the Impact Scales. Impact Scales may also be highly predictive of variation for individual SRD items. For example, scores on a "wanton assaultiveness" SRD item can be significantly predicted from Impact Scales (Truckenmiller, Note 5). Thus, the possibility that similar results might obtain for predicting self-reported vandalism seems a promising avenue of investigation.

The HEW behavioral model is one wherein mutually reinforcing components press toward and interact with positive youth development on the one hand, or delinquency on the other. In the positive direction, a sense of general societal

belonging, youth perceived access to desirable social roles, youth perceived positive labeling by significant others, and youth perceived positive peer group pressure are all synergistically reinforcing with positive, nonproblematic behavior. In the negative direction, alienation, perceived lack of access to desirable social roles, perceived negative labeling by significant others, and perceived negative peer group pressure are all mutually reinforcing with problematic and delinquent behavior.

Twelve Impact Scales measure these major components. The alienation component is tapped by the Impact Scales Normlessness vs. Conformity, Powerlessness vs. Control, and Societal Estrangement vs. Societal Integration. Youth perceived labeling by significant others is reflected by three Impact Scales: Negative vs. Positive Labeling by Parents, by Teachers, and by Peers. Another Impact Scale, Parental Rejection, might logically be grouped with the negative labeling scales. Impact Scales Perceived Access to Educational Roles and Perceived Access to Occupational Roles are measures of the perceived access to desirable social roles component. The three remaining Impact Scales are: Normative Peer Group Pressure (negative), Self-Esteem, and Self-Reported Delinquency (SRD).

The SRD item pertaining to vandalism reads as follows: "Damaged public or private property just for fun", endorsed "Never", "Once or Twice", "Several Times", or "Very Often." It is this item which serves as the dependent variable. Impact Scales excluding SRD served as the predictor variables. Since age and sex have been found the most SRD predictive of demographic variables used in the HEW model (Fink & Truckenmiller, Note 6), these too were included as predictor variables in the present vandalism study.

Method

Subjects

The subjects were 1,550 males and females, ages 10 - 19 years old, who comprised a roughly 6% systematic random sample of youth in schools in one of many county project bases.

Procedure

Materials consisted of the HEW Impact Scales and a demographics questionnaire administered as part of the Youth Needs Survey Questionnaire (Elliott et. al., Note 1) given in the Pennsylvania Youth Services Systems demonstration project (Lombardo, 1977; and Truckenmiller, Skok, & Lennon, 1978). Data was collected by administration of self-report questionnaires with proctors on hand to help with any questions. Confidentiality was maintained by use of respondent identification numbers rather than names.

A stepwise multiple discriminant function analysis of Impact Scales (excluding SRD), age, and sex on the SRD item "Damaged public or private property just for fun" was run using a BMDP statistical package (Dixon, 1981). Youth endorsing "Never" and "Once or Twice" on the vandalism item were considered the Low Vandalism group. Youth endorsing the item "Several Times" were considered the Mid Vandalism group. Youth endorsing the vandalism item "Very Often" were considered the High Vandalism group.

Results

Table 1 shows a summary of variables successively extracted via stepwise multiple discriminant function analysis and the corresponding approximate F-statistic for the completed analysis. The variables most predictive of vandalism

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Insert Table 1 about here

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level in order of successive extraction were: Normative Peer Pressure; Youth Perceived Negative Labeling by Parents; Normlessness; Youth Perceived Lack of Access to Educational Roles; Youth Perceived Negative Labeling by Peers; and sex (males more likely to engage in vandalism).

Table 2 shows: the number of cases cross-classified into Low Vandalism, Mid Vandalism, and High Vandalism groups; the percentage of each actual apriori group correctly predicted into its own category via predictor variables; and the percentage of each aposteriori group (all cases predicted into any given level) containing appropriately placed members of the apriori group. The placement of actual apriori group members (Low Vandalism for example) into Low, Mid, and High Vandalism groups is tallied row-wise. The composition of aposteriori groups, for example, the numbers of all those predicted to be High Vandalism coming from Low, Mid, and High Vandalism apriori groups, is tallied column-wise.

Insert Table 2 about here

It can be seen from Table 2 that row-wise, 74.4%, 47.6% and 57.9% of the actual apriori Low, Mid, and High Vandalism groups respectively could be correctly classified as such from predictor variables. Overall, 73.4% of the youth were correctly classified. Column-wise, it can be seen that 98%, 10%, and 8% of the aposteriori Low, Mid, and High Vandalism groups came from the corresponding apriori groups. On an aposteriori basis then, only 2% of the youth predicted into the Low Vandalism group will be false positives for that group, 90% of those youth predicted into the Mid Vandalism group will be false positives for that group, and 92% of all youth predicted into the High Vandalism group will be false positives for that group.

Table 3 gives the variable means for the entire group and for the vandalism level subgroups. Table 4 gives the corresponding standard deviations.

Insert Tables 3 and 4 about here

Discussion

As can be seen from Table 1, Normative Peer Pressure towards delinquency was the most predictive variable with respect to vandalism according to the self-reports of youth. Youth Perceived Negative Labeling by Parents was the second most predictive variable, followed by Normlessness, Youth Perceived Negative Labeling by Peers, Youth Perceived Lack of Access to Educational Roles, and sex. Examination of Table 3 shows that the High Vandalism group scored highest on the Impact Scales involved, and that the ratio of males to females (a score of 1 being all males, 2 being all females, and 1.5 being an even split) was highest in the High Vandalism group.

With respect to the HEW Youth Development Model, some aspect of each major component was found to be discriminatively predictive of vandalism: Peer Pressure; Normlessness, and aspect of alienation; Youth Perceived Negative Labeling by Parents and by Peers, two out of three negative labeling scales; and Youth Perceived Lack of Access to Educational Roles from the lack of positive social role access component. These results are similar to those found in a study classifying the same sample of youth into low, medium, and high SRD delinquency levels from Impact Scale scores via stepwise multiple discriminant function analysis (Truckenmiller, 1982). The three most discriminative variables were identical to those found in the present study: Normative Peer Group Pressure, Normlessness, and Youth Perceived Negative Labeling by Peers. Youth Perceived

Negative Labeling by Parents was also common to both studies. Youth Perceived Lack of Access to Educational Roles was but a minor predictive variable with respect to vandalism, and role access variables were conspicuously absent in the SRD prediction study. Other variables of minor SRD discriminative power (Self-Esteem; Societal Estrangement; Youth Perceived Negative Labeling by Teachers; and Parental Rejection) were not predictive with respect to vandalism level. The accuracy of vandalism level prediction from Impact Scales and sex is very similar to that found for predicting general delinquency levels, as measured by SRD, from these variables (Truckenmiller, Note 7), both with respect to the overall number correctly classified as well as the pattern of false positives and false negatives.

The problem of false positives such as encountered here in the High Vandalism group is typical of situations where one is attempting to predict rare events on an actuarial basis (Monahan, 1981). The apriori High Vandalism group was composed of only 19 cases, or about 1% of the sample. It seems rather remarkable to this writer that 11 of the High Vandalism cases were correctly picked. While 122 cases were incorrectly identified as High Vandalism cases, yielding 92% false positives, this represents only 8% of all those who could have been misclassified into the High Vandalism group on the basis of discriminative Impact Scales and sex.

It appears that the predictors of vandalism are the same as for delinquency in general, and that peer relations are the most predominately associative of several factors. Many of the factors identified as contributing to vandalism in previous literature, such as peer pressure (Richards, 1979), alienation (Cardinell, 1974; Besag, 1975; National Education Association, 1975; and the Institute for Development of Educational Activities, 1974), and problems with parents (California School Board Association, 1980) have also been identified in the present study.

As with delinquency in general (Truckenmiller, 1982a, 1982b, 1982c), the most potently predictive factors involve human relationships and a general sense of societal belongingness rather than perceived access to educational and occupational roles per se. It appears that educational and occupational remedies must be crafted within a larger context of modifying the interpersonal relations of youth if such programs are to have maximum impact with respect to preventing and reducing the frequency and seriousness of juvenile vandalism.

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Footnotes

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Table 1

Summary Table for the Multiple Stepwise Discriminant Function Analysis of HEW Community Program Impact Scales, Age, and Sex vis a vis Self-Reported Vandalism Levels

Step Number	Variable Entered	F Value to Enter	Number of Variables	Approximate *F* - Statistic	Degrees of Freedom	
1	Nrmppr	65.3901	1	65.390	2.00	1547.00
2	LabPar	17.5243	2	41.085	4.00	3092.00
3	Normlss	9.1183	3	30.564	6.00	3090.00
4	Acced	4.8369	4	24.187	8.00	3088.00
5	LabPer	5.0177	5	20.402	10.00	3086.00
6	Sex	4.0213	6	17.704	12	3084.00

Note: Nrmppr = Normative Peer Pressure Towards Delinquency; LabPar = Youth Perceived Negative Labeling by Parents; Normlss = Normlessness; Acced = Youth Perceived Lack of Access to Educational Roles; LabPer = Youth Perceived Negative Labeling by Peers.

Table 2

Classification of Cases into Low, Medium, and High Vandalism Level Groups from HEW Community Program Impact Scales, Age, and Sex via Multiple Stepwise Discriminant Function Analysis.

Apriori Group	Percent Correct	Predicted (aposteriori) Group			Totals
		Low Vandalism	Mid Vandalism	High Vandalism	
Low Vandalism	74.7	1097	269	102	1468
Mid Vandalism	47.6	13	30	20	63
High Vandalism	57.9	1	7	11	19
Totals		1111	306	133	1550
Predicted Percent Correct	73.4	98	10	8	

Table 3

Variable Means for Low, Middle, and High Vandalism Levels and for the Complete Sample

	Group			
Variable	Low Vandalism	Middle Vandalism	High Vandalism	Complete Sample
Age	14.97	14.87	14.53	14.96
Sex	1.53	1.28	1.16	1.51
Vandalism	1.26	3	4	1.36
Normlss	12.47	14.68	17.63	12.62
Socest	38.98	40.41	41.17	39.06
Acced	10.40	10.30	9.47	10.38
Accop	13.41	12.72	11.21	13.36
LabPar	16.06	21.03	27.16	16.40
LabTch	16.40	21.87	29.84	16.79
LabPer	16.95	23.27	27.32	17.33
Slfest	29.76	29.16	29.83	29.74
Nrmppr	14.26	18.12	20.41	14.50
Parrej	8.62	9.54	11.26	8.69
Control	34.27	32.24	29.87	34.14

Table 4

Variable Standard Deviations for Low, Middle, and High Vandalism Levels and for Complete Sample

	Group			
Variable	Low Vandalism	Middle Vandalism	High Vandalism	Complete Sample
Age	1.73	1.57	1.12	1.72
Sex	.50	.46	.37	.50
Vandalism	.44	.00	.00	.43
Normlss	2.89	2.18	2.34	2.85
Socest	6.28	7.11	7.94	6.33
Acced	1.40	1.37	1.58	1.40
Accop	2.34	2.50	3.52	2.37
LabPar	5.91	7.17	8.09	6.00
LabTch	7.08	7.13	10.25	7.13
LabPer	6.26	6.13	8.67	6.29
Slfest	4.61	4.60	6.36	4.63
Normppr	3.65	3.16	2.73	3.62
Parrej	2.65	3.30	2.53	2.68
Control	4.06	4.13	2.95	4.05